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The impact of work engagement and health in productivity associated with presenteeism: A Portuguese study

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Abstract

The present study aims to analyze the impact of different levels of work engagement and health conditions on productivity associated with presenteeism. Data were collected on a daily basis from a Portuguese hotel (n = 72). It showed that more work engagement is associated with more productivity, while more types of illness and risks are associated with higher productivity loss. Furthermore, the study addresses presenteeism costs and discusses some managerial implications of the most reported health condition – stress – and one associated organizational consequence - job burnout. The study also discusses the importance of job demands and job resources at organizations.

Keywords: Presenteeism, Engagement, Health, Hospitality

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Introduction

Being referred to as an emerging concept, presenteeism is the act of an employee going to work despite suffering from any kind of illness. This term is commonly associated with absenteeism, nevertheless the two concepts should not be seen as opposite terms even if some reasons and consequences for both may be shared. Presenteeism may have reasons such as the love to the job, the need for the money and the impossibility of having paid sick days, or even job insecurity, the fear of losing the job which happens more in competitive economies. It was estimated that in 2006 in the United States, around 39% of the low-wage workers were not allowed to have any paid period off for personal sickness conditions.

Some consequences of presenteeism can be highlighted such as productivity loss, poor health and even exhaustion and the risk of workplace epidemics not only to colleagues but also to possible customers and clients. For instance, in the food industry an epidemic would compromise the safety of the workplace through contamination. It is clear that presenteeism could bring high costs to organizations.

The association between absenteeism and presenteeism relates to the fact that in both cases there is a reduction in productivity at the workplace. The main difference is that in the presenteeism case, this reduction is not total as in the case of absenteeism. Moreover, some jobs are more prone to presenteeism, such as nurses, doctors (welfare related) and teachers (education sector). Doctors may feel they are irreplaceable and this makes pressure for attending to work while being ill. Other causes may be related with high workload which in turn will may an individual feel that his/her presence is almost imperative.

There is no doubt that the biggest reason for presenteeism is the existence of a specific health condition (HC) that will in the short term reduce employees' productivity at the workplace. Moreover, there is another variable that fluctuates daily and it is thought to influence positively presenteeism through work attitudes that is work engagement.

This study was thought to access the impact of work engagement on productivity associated with presenteeism on the hospitality industry. Furthermore, and branching these two core concepts the study aims to quantify, in money, the impact of different health conditions on productivity as well as the different predictors of work engagement.

Literature Review

Presenteeism

As a relatively new concept, presenteeism, also known as sickness presence, stands for going to work while ill. Johns (2010) presents nine different definitions of presenteeism starting as the opposite of health absenteeism (Smith,1970), known as missing work while ill or showing no sick absenteeism (Kivimäki et al., 2005) to concepts including a reduction on productivity level caused by health problems (Turpin et al., 2004; Hummer Sherman, & Quinn, 2002; Whitehouse 2005). Nevertheless, these definitions do not point any motive or consequence for the act of presenteeism. It is likely that one person who loves his job or feels insecure at it will attend work when ill more often. Therefore, one may expect that the individual will not be as productive as he would be without a specific HC. Hence, presenteeism may also affect employee daily life by reducing the quality of the work done or affecting the work environment through, for instance, epidemics (Johns, 2010). There are two branches of the study of presenteeism – one focusing more on the frequency of presenteeism and the other more concerned with the impact on the workplace productivity. However, studying about productivity loss is just one of the perspectives: indeed, the productivity level when an employee chooses to go to work despite ill is greater and relevant when compared to the case of absenteeism (Johns, 1991). Hemp (2004) even defended the correct management of presenteeism may grant organizations a competitive advantage. Some positive factors for presenteeism are, for instance, work involvement and job satisfaction acting as presence incentives. The latter factor is justified as, even when sick, going to work still brings positive

experiences. In the opposite side: job insecurity and time pressure are seen as double risk factors being negative predictors for sickness presence influencing directly as stressors and indirectly by deteriorating an individual's health. (Aronsson & Gustafsson, 2005; Hansen & Andersen, 2008). The frequency of presenteeism is many times measured by asking people how many times they went to work despite feeling unhealthy (Aronsson & Gustafsson, 2005; Aronsson et al., 2000), and its impacts on productivity is commonly measured by asking people to reflect on how their health condition had interfered with their workplace performance.

Regarding sickness presence causes, factors such as job control systems over employee attendance and high wages (Johns, 1997) may be highlighted. The latter concept is common in jobs with high work demands which stands for another cause for presenteeism (Demerouti et al., 2009). Another one, also intended to stimulated absenteeism, is downsizing which is intimately related with job insecurity in what concerns attending work while sick. Simpson (1998) also studied the *competitive presenteeism* most common when downsizing occurs. Furthermore, the kind of employment status – if a worker has a temporary or permanent contract also influences the choice of presenteeism – temporary workers choose to attend work while sick more often. Also, different presenteeism cultures explain the large variance in personal attendance to work: jobs such as nurses, doctors or school teachers are more prone to work while ill than other types of jobs. Additionally, the ease of replacement at work (Aronsson & Gustafsson, 2005; Aronsson et al., 2000) and teamwork (Grinyer & Singleton, 2000) are also thought to foster the choice of going to work when ill. Factors such as work demands, job security and reward systems also influence the choice: for instance, the impact of work demands on presenteeism was studied to be moderated by supervisor support which is explained by the help given to the employee to cope with uncertain and vague work tasks – which explains why role ambiguity also impacts productivity as it leads to ineffective

performance. With the supervisor help and clarification, employees are able to save their resources in order to allocate them to other top priorities (social exchange theory). Hobföll (2001) concluded that when employees suffer from health problems they tend to rely on social support in order to be able to complete the work assigned to them as it becomes more difficult to find coping strategies (Bauer & Simmons, 2000). When there is a lack of information, clarity or procedures, employees may experience feelings of uncertainty, job stress and lower levels of job satisfaction (Getzels & Guba, 1954; Kahn et al., 1964; Kelloway & Barling, 1990; Quah & Campbell, 1994). In the other hand, some consequences of presenteeism can be highlighted such as: the loss on productivity and the increased health costs once the person may remain sick for a long period of time instead of having stayed at home.

Johns (2010) developed a model explaining how factors such as the person, the context, the job environment, job motivation, job security and the type of health event may impact the choice of presenteeism or absenteeism. It explains why different individuals may choose to act differently or choose presenteeism and consequently absenteeism.

Work Engagement

It is associated with a psychological connection to the work being commonly defined as a positive state of mind that is work related and expressed by vigor, dedication and absorption (Schaufeli & Bakker, 2010; Schaufeli, Salanova, Bakker, 2002. Vigor stands for having energy at work, for the effort and time that employees devote to their work tasks and in the capacity to deal with obstacles, usually referred to as mental resilience. Dedication reflects how employees are involved at work. Lastly, absorption refers to an employee being fully concentrated at work (Schaufeli, Bakker, & Salanova, 2006).

In another viewpoint, Rothbard (2001) referred to engagement as a motivational construct branched into attention and absorption. Johns (2010; p. 532) argued that “those with

positive work attitudes and favorable justice perceptions would, on the margin, exhibit presenteeism".

Work engagement is commonly associated with concepts such as job satisfaction and organizational commitment. Yet, the latter ones are related to the job and to the organization while work engagement relates to attitudes towards the work tasks meaning that an individual may be engaged with the work he performs however not committed to the company where he works on (Bakker & Oerlemans, 2011; Hallberg & Schaufeli, 2006). Moreover, past research has study the job demands-resource model showing that job resources act as drivers of work engagement and that high job demands strengthen this relationship (Bakker, Hakanen, Demerouti, & Xanthopoulu, 2007; Hakanen, Perhoniemi, & Toppinen-Tanner, 2008). In the job resources area, one may highlight social support from managers and colleagues, supervisory coaching, performance feedback, skill variety, autonomy and learning opportunities. These resources help individuals to manage high job demands allowing for personal development and growth. The aforementioned job resources have a positive impact in personal resources such as: optimism, self-efficacy and self-esteem due to the motivational potential of job resources which in consequence impact positively vigor, dedication and absorption (Bakker, 2011; Xanthopoulu, Bakker, Demerouti, & Schaufeli, 2009).

Bakker (2011) argued that engaged employees perform financially better and more effectively than non-engaged employees which also drives job performance. Additionally, engaged workers transmit the feeling of dedication and vigor to other employees. Moreover, when employees are engaged with their work tasks they experience better health and positive emotions, they devote time to grow and to develop their personal resources. Engaged individuals focus less on their health and more on their work – they do feel tired and exhausted when working intensely, however they face that as a positive state of mind

reflecting positive accomplishments (Macey, Schneider, Barbera, & Young, 2009). Based on this study, the following hypothesis was formulated:

H1: Work Engagement influences positively Productivity associated with Presenteeism.

Work engagement is possible to vary according to different contexts or situations, within the same individual, due to the variable components of vigor, dedication and absorption. Sonnentag (2003) defended that work engagement fluctuates daily and so it is important to study the predictors of work engagement daily variance.

Diary Studies

It is a research method based on longitudinal studies allowing to collect data from repeated participants over a period of time. In the present study, variables were analyzed in a daily basis. The choice of studying daily fluctuations brings several advantages. Firstly, daily studies are able to lower the retrospective bias (Reis & Gable, 2000) meaning that the memory of people is more accurate at a daily basis rather than in a longer period of time. Secondly, daily studies take into account the feelings and the behaviors that follow a specific situation which in longitudinal studies is more difficult to capture (Ohly et al., 2010). Daily studies focus more on the situation than on the person, so it is easier to access the predictors of the variables in study, for instance, if there are specific situations that predict work engagement (Ohly et al., 2010).

Past research with Italian teachers on daily work engagement fluctuation showed that one driver of daily work engagement was daily support from colleagues. Also, on the days with high job demands the reported level of exhaustion was high, as well as the reported health problems. So, the following hypothesis was formulated:

H2: Support from colleagues at the workplace influences positively daily work engagement.

Health Conditions and Health Risk Factors

One way to measure and even reduce productivity loss associated with presenteeism is by discriminating which are the HC that more often lead to presenteeism and counteract them.

In order to estimate the amount of productivity loss associated with health risk (HR) factors and HC a study with more than one million employees of OptumHealth HRA was performed (Mitchell & Bates, 2010) with data collected in two different moments in time. The study aimed to access the presence of thirteen HC or motives of illness, four HR factors and the productivity loss related to absenteeism and presenteeism. Conclusions from this study revealed that allergies were the most prevalent HC reported and obesity as the most HR reported. Participants reported on average 1.99 work days lost due to illness and 9.04 days that they went to work despite being ill. From the study, it was concluded that both presenteeism and absenteeism were positively related with the presence of HC and increased number of HC and HR were associated with reduced levels of productivity. Then, the following hypothesis were formulated:

H3: Presenteeism is positively related with the presence of health conditions.

H4: Increased number of reported health conditions and health risks is associated with reduced productivity level.

A study from Lerner et al., (2004) measured the impact of *depression* in productivity. It proved that individuals who suffered from depression also reported higher productivity loss when compared with a control group. *Pain* was also studied (Allen, Hubbard and Sullivan, 2005) and it was found a positive relation between work limitations and the severity of pain.

Employee Engagement in the Hospitality Industry

Work Engagement proved to be a very important variable in this globalization era where competition takes place and different organizations fight for having the best human resource practices. A study in the Indian hospitality industry focused on the importance of

having engaged employees in order to achieve high levels of both productivity and profitability. Mohd. Sadiq (2014) argued that engaged workers express more emotional attachment to their jobs, they show less intentions to leave the organizations (reduced turnover) and they show better health. In consequence, engaged workers will care more about the service they perform which will, at last, improve customer satisfaction and increase the quality of the service level offered. If hotel guests are connected to the hotel through employee engagement, those guests will not only return to the hotel but also recommend it to their family and friends.

Methodology

In order to access the impact of health and engagement on presenteeism, two different questionnaires were performed in a hotel. The first one was collected once for each person and aimed to access the demographic variables (age and gender), how long the employee was working at the hotel, the absenteeism days due to personal illness and due to care for ill family members in the last 6 months and also the days the employee went to work despite being ill in the last 6 months (presenteeism days). It was asked if there was pressure from the organization or from colleagues to go to work while being ill and then HR and HC were accessed, both at the moment and in the past 6 months. Finally, employees were asked if they were under medical treatment for the HC reported and if they felt that because of the HC reported, he/she felt a reduction on productivity.

A second survey was performed to access the daily fluctuations in work engagement and in the variables “completing work” and “avoiding distraction” of presenteeism. This second survey was filled by employees at the end of the day during 4 days and it was linked to the first one once an individual code was requested at both. The daily questionnaire asked employees how much productivity was lost during the day because of the health condition/s reported. Moreover, it was asked if during the day the employees felt work pressure, if they

controlled their own work and if they felt support from colleagues. Followed by these questions, SPS-6 and UWES were asked in a daily basis[1]. The first survey was sent to employees at the end of the day. At the end of the survey there was a link to the second survey and it was asked response from the ones who reported at least one HC in the first survey. From then on, at the end of the days, it was sent to the employees an email with the questionnaire link. The mortality rate between the unique survey and the first daily survey was 17%, from the first to the second was 23%, from the second to the third was 24% and from the third to the fourth was 51%.

Measurement Models

The Stanford Presenteeism Scale (SPS-6, Koopman et al., 2002) consists of a range of 6 questions related to presenteeism in which respondents answer on a scale from "strongly disagree" to "strongly agree". SPS-6 aims to measure the employees' ability to *Avoid Distraction* (items 1, 3 and 4 which were reversed) and to *Complete Work* (items 2,5 and 6). Therefore, high scores on SPS-6 mean that employees' work was less affected by presenteeism. The validation to the sample used proved good psychometric properties with a Cronbach's alpha of 96.8%.

The scale used to measure work engagement was the Utrecht Work Engagement Scale (UWES, Schaufeli et al., 2002; Schaufeli, Bakker, & Salanova, 2006). The UWES includes items measuring vigor, dedication and absorption. Respondents answered on a scale ranging from "never" to "all the day". The initial version of UWES includes 25 items, however, as this study aimed to access daily fluctuations on the engagement variable, it was used a reduced version with 6 questions (1 and 2 for vigor, 3 and 4 for dedication, 5 and 6 for absorption). The Cronbach alpha of this scale showed good internal consistency with an alpha of 93.4% (See Table 1).

[1] See Appendix 1 on the second document of appendixes for further detail on questionnaires.

Table 1: Cronbach alphas for SPS-6 and UWES

Scale	Number of items	Cronbach Alpha	Source
Stanford Presenteeism Scale	6	0.968	Martinez & Ferreira, 2012
Utrecht Work Engagement Scale	6	0.934	Schaufeli & Bakker, 2003

Results

Descriptive analysis

The survey was performed with a sample of employees working at a hotel. The organization asked for its name to not be revealed due to the information contained on questionnaires regarding its own employees.

The surveys were held in Portuguese and they were active from October 31st to November 4th. During this time, employees filled digital versions of the surveys. The unique survey counted with a total sample of 72 individuals (n = 72) from which 47% were men and 53% were women. The age mean was 34 years ranging between 21 and 54 years. The first daily survey counted with a sample of 60 individuals, reducing to 46 in the following gather, to 35 in the third gather and finally to 17 individuals in the last one. The average employees' seniority was 7.2 years with a standard deviation of 6.4 years. From the ones who answered to the unique survey, the average reported absenteeism days because of personal illness were 0.75 days and 0.31 days due of care for ill family members in the last 6 months. Regarding presenteeism, the average days in the past 6 months were 4.1. The main causes presented for presenteeism were: "I am the manager of my department", "my subordinates need my help", "the work needed to be done", "I have daily tasks I need to accomplish", "the client depends on me" and "I had unpostponable meetings".

From the total sample, 83% of the hotel workers reported having some type of HC. On average, the hotel workers reported having, at the moment, 1.47 HR and 1.5 HC. The most reported HR were smoking (50%) and alcohol use (32%) and the least reported was obesity

(18%). Regarding HC, the most reported psychological ones were stress (33%) and anxiety (18%) whereas the most reported physical causes were allergies (24%) and migraine (17%).

Presenteeism and Work Engagement

Data collected in a unique basis showed that workers who reported having a riskier lifestyle also reported an increased number of HC at the moment (p=.008). In what relates presenteeism, the number of days workers went to work despite being ill in the last 6 months depended positively on the number of HC reported to have at the moment but not on the number of HC reported to have in the last 6 months of work which rejects the hypothesis formulated: *"Presenteeism is positively related with the presence of health conditions"*. In another hand, employees reporting more HR also reported more presenteeism days in the past (p = .019).

Regarding data collected in a daily basis, the core variables productivity despite presenteeism and work engagement were accessed. Results show that there is variance among the different individuals and among the different days (See Table 2 and 3).

Table 2: Variance on Productivity associated with Presenteeism

Parameter		Estimate	Error Error	Wald Z	Sig.
Repetead Measures	Var: [Day=1]	.555620	.150984	3.680	.000
	Var: [Day=2]	.417156	.132421	3.150	.002
	Var: [Day=3]	.530263	.185850	2.853	.004
	Var: [Day=4]	.791979	.358324	2.210	.027
Intercept [subject = Code]	Variance	.811778	.192596	4.215	.000

Table 3*:* Variance on Work Engagement

Parameter		Estimate	Error Error	Wald Z	Sig.
Repetead Measures	Var: [Day=1]	.898797	.182635	4.921	.000
	Var: [Day=2]	1.170044	.250682	4.667	.000
	Var: [Day=3]	1.370481	.327819	4.181	.000
	Var: [Day=4]	.874310	.343680	2.544	.011

Data collected showed that higher levels of work engagement at the hotel predict employee's productivity despite presenteeism. Moreover, the higher the number of HC

reported by the employees, the lower becomes the productivity associated with presenteeism ($p = .013$). Productivity was accessed through the SPS-6 and results showed that higher number of presenteeism days in the past influence negatively productivity ($p = .000$). Additionally, as hotel workers were faced with more daily work pressure, they also reported lower scores on SPS-6 meaning that they felt their productivity being reduced ($p = .014$).

Despite productivity accessed through SPS-6, productivity loss per day was also measured at each day to understand, in percentage, the impact of the health status on the workplace productivity. The results supported the aforementioned results on the SPS-6 as work pressure was found to increase the daily productivity loss ($p = .057$). Moreover, as employees felt more supported in the hotel, they also reported lower levels of productivity loss per day ($p=.013$). Also, more engaged workers reported lower daily productivity loss ($p = .000$).

Concerning work engagement, three variables were tested as predictors: autonomy, through control of the own job, support from colleagues and work pressure. Results presented that workers with more autonomy exhibit higher levels of work engagement ($p = .000$). Moreover, as employees feel supported inside the organization they become more involved with the daily work tasks ($p = .000$), which supports the second hypothesis formulated: *"Support from colleagues at the workplace influences positively daily work engagement"*. In another hand, this level of involvement decreases if an employee is faced with pressure in the work tasks performed ($p = .000$). Finally, as workers reported higher levels of presenteeism days in the past, they simultaneously reported lower levels of daily work engagement. ($p= .054$).

Regarding now another variable commonly associated with presenteeism - health absenteeism – was measured using *"missed work days in the last 6 months"*. Conclusions are that as employees follow a riskier lifestyle, they tend to be absent from work more often ($p =$

.048). Moreover, employees who suffered from more HC in the last 6 months also reported high levels of missed work days. Presenteeism days also showed to be positively related with absenteeism days, both measured in the last 6 months (p = .000). Both presenteeism days and number of HC in the last 6 months explain 49.9% of the variance in health absenteeism.

In what concerns the impact of different HC in productivity loss, the results show that depression is the HC that most impacts productivity. Besides there were only two individuals reporting depression as a current HC, the average productivity loss reported by them was 19% per day. Additionally, employees reporting depression also presented increased levels of missed work days and presenteeism days in the previous 6 months. As it would be expected, depression showed to be negative related with work engagement.

There are some types of HC that showed to present in older employees as osteoporosis, heart disease and back pain (p = .000). Employees who reported HC such as anxiety, stress and allergies showed an average of productivity loss around 6%, 6% and 4% respectively.

Discussion

Previous studies have shown evidence that men are less prone to exhibit presenteeism than women (Johns, 2010). In fact, results from the present sample show that the average presenteeism days in the previous 6 months for men is 3.8 while for women this number is larger and equal to 4.4, however, no significant differences were found at SPSS. Secondly, as prior authors studied the different HC as the root causes for presenteeism, in a study with nurses in a hospital at U.S. the main causes reported were allergies and lower-back pain while in this study in the hospitality industry the main cause reported was stress followed by allergies.

Regarding the hypothesis that were intended to test in the present study, the one stating that more HC and HR are associated with an increased loss on productivity was

partially supported. In fact, responses from employees showed that as individuals reported more HC, the productivity associated with presenteeism was lower. However, the same does not apply to HR, meaning that being a smoker, consuming alcohol or having overweight is not significantly associated with productivity. Inside all the HC, results showed that individuals reporting psychological diseases like depression exhibited a level of productivity loss around 19%, on average, while stress and anxiety were around 6%, and allergies, the most reported HC, reported an average daily productivity loss rounding 4%. Being a recurrent type of disease, allergies seem to report lower loss on daily productivity than psychological types of illness. This result may be justifiable with the tendency of employees to adapt to live and work with that health diseases so that it affects the less possible on the work tasks required (Van den Heuvel, Geuskens, Hooftman, Koppes, & Van den Bossche, 2010).

Concerning daily work engagement, it proved to predict positively daily productivity associated with presenteeism. This result supports the first formulated hypothesis and it is in accordance with past studies that argue that engaged employees perform better at work than non-engaged ones, by performing in a more efficient way (Bakker, 2011). Bakker defends several reasons for that: firstly, when employees are involved in their work tasks they create a good and motivational environment around (Bakker & Xanthopoulu, 2009). Secondly, engaged employees focus more on their work, show higher levels of commitment with their work tasks, and so focus less on their health (Bakker, 2011). Additionally, engaged workers experience positive thinking and simultaneously different and creative ways for the personal development, so, contributing for high levels of efficacy at the workplace (Fredrickson, 2001).

In this study, 33% of the inquired people reported to suffer from stress. It is a normal physiologic response of the human body caused for something that make an individual feel uncomfortable or threat by an internal or external force which can be related to personal or

professional life. It is a type of illness that can reveal several consequences at the workplace specially if it is the type of work where individuals need to interact with each other or even with clients. One of the consequences of accumulated stress at work is the appearance of another types of related illness. Job burnout is the result of an extended experience of stress (Tsigilis et al., 2006). It was studied to impact productivity at work affecting employee's psychology and the relation with others. Employees with burnout have different behaviors inside organizations that may result in absenteeism or even in turnover (Maslach, Schaufeli and Leiter, 2001).

Another interesting point to note is the fit of the job demands-resource (JD-R) model in this study and the impact of the motivational potential of job resources (Johns, 2010). In one side the model there are work demands which lead to physical and mental exhaustion. This phenomenon results in the health impairment – the employee starts having less energy derived from the work pressure and from the overall job demands which may turn on job stressors when the effort required is high. Consequently, the individual's health starts decreasing explaining the negative impact of job demands in productivity. In the other hand there are job resources that help on reducing the negative impact of job demands and stimulate the employee personal growth (Johns, 2010). Job resources have a motivational construct where autonomy and support from supervisor and colleagues may be highlighted once they were tested on this study. The JD-R model fits in the present study: as employees are given autonomy and are being supported from the surrounding environment, the work engagement levels increase. Additionally, when job demands are high (i.e. work pressure) the level of engagement is even higher when compared to null job demands. The study showed that job resources have an increased motivational impact when the level of work demands is high. This is an important input for companies and it helps on focusing not only in one side of the balance but on both, once it was proven that work pressure alone impacts negatively on

work engagement and positively on burnout. By fostering job resources companies are able to achieve organizational work goals and stimulate the employee development and constant learning.

A further important finding of this study is that work engagement acts as a mediator on the relation between work pressure and productivity associated with illness. In practice, this means that exists a negative relation between work pressure and productivity, however, when engagement is added to the model, it buffers the negative impact on productivity. The second interesting finding on mediation is that "being a smoker" acts as a mediator in the relation between work engagement and productivity despite illness. There is, indeed, a positive relation between work engagement and productivity. What happens is that if the person is smoker it nulls the impact of work engagement on productivity. This effect can be explained by the theory of reasoned action (TRA, Ajzen & Fishbein, 1969, 1980). The TRA explains the relation between attitudes and behaviors, in this case applied to employees, in the case they need to take an action. It bases on predicting the worker's attitudes or behaviors taking into account the individuals' intentions and the expected outcome of that behavior. There is, indeed a positive relation between engagement and productivity, however, the fact of an employee being a current smoker changes the previous relation: the behavior intention of an employee concerning smoking is an objective behavior that will result in a consequent action (attitude). This objective behavior has, so, more impact on the relation engagement/productivity. As smoking is negatively related with productivity, "being a smoker" is able to null the positive relation between work engagement and productivity.

Summing the aforementioned mediations, this study was able to show that there is a relation in the following direction: lower levels of work pressure lead to increased levels of work engagement which may reflect on increased productivity levels for non-smoker workers or null effect on productivity for a smoking individual.

One of the most known strategies to cope with stress and high job demands is done by smoking. Many times it is seen as a way of reducing the emotional and negative stress consequences: as nicotine acts as a mood altering pill, smoking helps on turning the effects of stress (i.e.: anxiety and frustration) less harmful.

One of the most important implications of this study is the impact of presenteeism on the hotel's costs. Hemp (2004) defended that employee's sickness influences not only the quality of the work performed but also its quantity – workers might take more time performing the same tasks or making more mistakes, they might need to repeat them or the manual labor may turn more difficult. The costs can be divided in direct (pharmaceutical and medical expenses) and indirect (absenteeism costs and the short and long term disability).

Presenteeism, as opposed to absenteeism, creates costs that are hard to measure and difficult to point out: for example, pain will inevitably result in lost work time (Walter, F.). Many organizations do not realize the extension of presenteeism costs so, Hemp (2004) presented a way of measuring these costs according to the different health conditions that originated the act of going to work while ill: a study from Tufts New England Medical Center (Boston) matched the prevalence of specific HC with the aggregate annual loss in dollars through the average productivity loss for each type of illness. In line with this measure, some of the HC reported at the hotel can now be measured in money. On the table below, the values reflect the daily aggregate loss of six diseases according to the average daily productivity loss reported by employees at the hotel.

Table 4: Aggregate daily loss per type of illness

	Prevalence	Average Productivity Daily Loss	Aggregate Daily Loss
Migraine	16.7%	4.6%	2 145 €
Back Pain	11.1%	7.3%	2 728 €
Allergies	24.0%	3.8%	2 224 €
Asthma	2.8%	4.7%	306 €
Bronchitis	9.7%	3.3%	566 €
Depression	2.8%	19.2%	5 067 €

Managerial implications

In order to prevent job burnout at organizations it is important to tackle its root causes: past research argues that manager's positive emotions can strongly influence employees well-being at the company while other studies defend that taking breaks during the workday or putting away the digital devices may help preventing job burnout. These kind of work attitudes seem to be difficult at a hotel either in the F&B department where is difficult to pause and have breaks or in the back office where is impossible to work away from computers. Job burnout and engagement were studied to be negatively related and burnout was proved to be mainly predicted by high job demands and by lack of motivational job resources. It was found to be related with health problems and with intentions of turnover, since there may exist perceived more attractive alternatives (Schaufeli & Bakker, 2004). These imply some managerial constraints either if companies want to reduce job burnout or to foster work engagement. Additionally, a study in California (Thompson, 2001) showed that a supportive work environment helps on preventing job burnout. Conservation of resources theory (COR) explains how individuals seek to acquire the resources they need in terms of money, energy or personal and professional conditions and so, stress occurs when those resources are lost. The COR theory focuses on maximizing the acquirement of resources which would help on preventing job burnout.

It is critical not only to reduce job stress but to reduce the events that lead to stress such as job demands and simultaneously increase job resources. If companies want to invest on increasing job resources, they might need to invest in more flexible work times, in a simple job redesign (Quick, Nelson, & Hurrell, 1997), by creating an environment that fosters social support or having team building activities. By increasing job resources, companies are stimulating work engagement.

Regarding presenteeism costs, it is crucial for the hotel not only to reduce them but also to work in the direction of avoiding the act of sickness presence. Hemp (2004) argues that to reduce presenteeism it is necessary to make the whole organization aware that illness exist and that an action need to be taken. Secondly, both the managers and the HR team must know the different illness that exist inside the company and reflect on how it can impact the relation outside the company (i.e. with clients). Then it is necessary that more investment is done in preventing illness (i.e.: setting up health screenings). Additionally, companies should invest on teaching employees how to more efficiently manage their health (for instance, teach ways of reducing stress or have a healthier lifestyle). It is very important the rational of spending to save inside the hotel – pharmacy costs should be seen as an investment rather than a cost. In the end, the hotel may have a business competitive advantage.

Research Limitations

One of the aims of this study was to measure the impact of different health conditions in engagement and productivity. However, from the total sample of employees who answered the questionnaires and reported suffering from, at least, one type of illness, the mean of HC reported per person was 1.86 with a standard deviation of 0.86 meaning that in the majority of the cases people reported more than one type of illness. When measuring productivity loss per type of HC it was difficult to isolate a specific type of illness since in 64% of the cases, that loss was the result of the conjugation of two or more diseases. Accessing the productivity loss of those individuals, when only associated with one HC, would result in a very small sample size where some of the diseases could not even be studied as separated from others.

A second limitation of the study was that it was not able to clearly measure the presenteeism frequency according with the different types of illness, instead it focused more on the productivity loss associated with each one. Finally, the cost of presenteeism presented

was calculated according with past research. Therefore, it was not accessed the real cost on the hotel once it was not asked for the employees' salary on the questionnaires.

Conclusion

Some interesting and critical conclusions deserve to be highlighted from the study. Firstly, data confirmed that higher levels of work engagement predicted high productivity despite presenteeism which supports the first hypothesis generated. Secondly, employees suffering from more health conditions reported lower levels of productivity as well as the ones who were faced with more daily work pressure. Thirdly, were found three predictors of work engagement: autonomy and support from colleagues predicting positively which supports the second hypothesis created; and work pressure predicting negatively work engagement. Furthermore, absenteeism in the last 6 months was also found to be positively correlated with the number of health conditions in the past 6 months too. Finally, depression was the disease that reported more impact on productivity despite presenteeism and allergies was the main type of illness reported by the employees.

Regarding the third hypothesis stating that more HC were associated with increased level of presenteeism was rejected and the last hypothesis proved to be statistically supported from the data as it showed that more HC and HR reported were associated with increased losses in productivity associated with presenteeism.

Suggestions for Future Research

As presenteeism is an emerging concept, so are the studies on the area. Nowadays, companies need proofs that health is really connected and harms productivity associated with presenteeism. A good contribution for this area would be to study a company also in a daily basis but having a control group of employees. On the other group it would be interesting to test changes on job demands in order to measure the impact on productivity, engagement and on turnover intentions.

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